

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Examiner : Bao Q. Vu
Group Art Unit : 2838
Applicants : Alfred W. Muldoon
Serial No. : 10/082,481
Filing Date : February 25, 2002
Attorney Docket No. : 112810.112810
For : CONTROL USING TRANSDUCERS PRESENT
TO DETERMINE MODEL

MS AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

AMENDEMENT

In response to the Office Action mailed January 3, 2006, the period of response being until April 3, 2006, please amend the above-identified application as set forth on the following pages.

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IN THE CLAIMS

1.-20. Cancelled.

21. (Currently amended) A control for use in a ~~variety of models of a~~ device, the device having at least two models, the control device capable of ~~having~~ operating a plurality of output transducers, the output transducers converting electrical energy to some other form of energy, the ~~device~~ control comprising:

a selection means for energizing a ~~first plurality of circuits circuit, each of~~ the plurality of circuits capable of being completed by one of the plurality of output transducers; which could contain a first output transducer;

~~a sensor~~ sensing means for scanning each of the plurality of circuits to determine ~~whether~~ which of the plurality of circuits contains the first one of the plurality of output transducers is present; and

limiting means for limiting the operation of the control ~~to only these~~ output transducers to the model for which the required output transducers are determined to be present by the sensing means within a the device plurality of circuits.

22. (Previously Presented) The control of claim 21 where the output transducers are display elements.

23. (Previously Presented) The control of claim 21 where the output transducers are solenoids.

24. (Previously Presented) The control of claim 21 where the output transducers are motor windings.

25. (Previously Presented) The control of claim 21 where the output transducers are heating elements.

26. (Previously Presented) The control of claim 24 where the selection means is a relay.

27. (Currently amended) The control of claim 21 ~~further comprising a second circuit, and~~ where the sensor scans ~~the second circuit~~ more than one of the plurality of circuits to determine the presence ~~a second~~ of output transducers.

28. (Currently amended) The control of claim 27 where the selecting means selects which of the ~~first circuit and the second circuit~~ plurality of circuits is scanned by the sensor.

29. (Previously Presented) The control of claim 21 where the limiting means determines whether there is a fault in the output transducer.

30. (Currently amended) The control of claim 29 where the sensor detects whether a component other than ~~the first~~ an output transducer is in ~~the first circuit~~ one of the plurality of circuits, the component being distinguishable from both ~~the an~~ output transducer and from a failed output transducer by a scan using the sensing means.

31. (Currently amended) A control for operating with a plurality of models, each model having a number of display output transducers, the display output transducers indicating to an operator the operating mode of the model, comprising:

selection means ~~to attempt~~ to energize a plurality of the circuits, each of the plurality of circuits capable of containing at least one ~~that could contain~~ display output transducers;

sensing means for scanning the plurality of circuits to identify which of the plurality of circuits contains at least one display output transducers ~~are present in the~~ model; and

a limiting means for limiting the operation of the control to a first model ~~for which the required~~ the display output transducers are found ~~identified~~ by the sensing means.

32. (Currently amended) The control of claim 31 further comprising:
means for enabling the selection means, the sensing means, and the limiting means each time a user presses a key ~~is pressed~~.

33. (Previously Presented) The control of claim 32 where a single sensor of the sensing means scans more than one of the circuits to determine the presence of more than one of the output transducers.

34. (Previously Presented) The control of claim 33 where the circuits the single sensor scans are selected by the sensing means.

35. (Currently amended) The control of claim ~~34~~ 31 where in addition to the plurality of models using the display output transducers to indicate the operating mode of the model, the control also operates models using position switches to indicate the operating mode, a pair of contacts of the position switches occupying the circuit which contains display output transducers on other models.

36. (Previously Presented) The control of claim 35 where the sensing means scans the circuit selected by the selection means to determine the operating mode indicated by the position switches.

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37. (Currently amended) A method of operating a control, the control ~~having a first operating mode and a second operating mode capable of operating a first model and a second model~~, comprising:

energizing a first circuit;

detecting the presence or absence of a first transducer in the first circuit by scanning the first circuit;

enabling the control to ~~be operable with operate in the first operating mode~~ the first model if the first transducer is present in the first circuit; and

enabling the control to ~~be operable with operate in the second operating mode~~ the second model if the transducer is absent from the first circuit.

38. (Previously Presented) The method of claim 37 further comprising:

detecting whether the first transducer has failed.

39. (New) The method of claim 37 further comprising performing a scan of the components within the model to identify the operating modes of the model.

REMARKS

Applicant thanks Examiner Vu for his careful attention to this application.

The claims have been amended to more clearly define the invention of the present application.

The Examiner has rejected the claims as anticipated by Bhatnagar, U.S.

6,739,145.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). >"When a claim covers several structures or compositions, either generically or as alternatives, the claim is deemed anticipated if any of the structures or compositions within the scope of the claim is known in the prior art." *Brown v. 3M*, 265 F.3d 1349, 1351, 60 USPQ2d 1375, 1376 (Fed. Cir. 2001) (claim to a system for setting a computer clock to an offset time to address the Year 2000 (Y2K) problem, applicable to records with year date data in "at least one of two-digit, three-digit, or four-digit" representations, was held anticipated by a system that offsets year dates in only two-digit formats). See also MPEP § 2131.02. "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an *ipsissimis verbis* test, i.e., identity of terminology is not required. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990). Note that, in some circumstances, it is permissible to use multiple references in a 35 U.S.C. 102 rejection." MPEP § 2131.

Claim 21, as amended, requires a sensor for scanning the plurality of circuits to determine which of a plurality of output transducers is present in the model, and a limiting means for limiting operation of the control to output transducers determined to be present within the model.

The device shown *in* Bhatnagar does not have such a sensor or a limiting means. The control shown in Bhatnagar is capable of operating a large number of transducers. However, the control is configured by means of configuration data supplied by a configuration memory included with the said electronic controller. Col. 4, lines 1-7.

Thus, the device shown in Bhatnagar does not show a sensor for scanning a plurality of circuits to determine the presence of transducers. It also does not have a limiting means for limiting the operation of the control to only those output transducers determined to be present by the sensor.

As to claim 29, nothing in Bhatnagar shows or suggests a limiting means which determines whether there is a fault in a transducer.

Claim 31, as amended, requires among other things a sensing means for scanning the plurality of circuits to identify which of the plurality of circuits contain at least one display output transducers. There is nothing in Bhatnagar which shows or suggests such a sensing means.

Claim 31 further requires a limiting means for limiting the operation of the control so that the control only attempts to control the display output transducers found by the sensing means. Thus, the control will not attempt to control a display output transducer not found by the sensing means.

The control in Bhatnagar does not show such a function. Once it is configured, it does not attempt to identify the transducers actually present within the system.

Claim 37 is a method of operating a control. The control capable of operating a first and a second model. A first circuit is energized, and the

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the presence or absence of a first transducer in the first circuit by scanning the first circuit. The control is enabled to operate as the first model if the first transducer is present in the first circuit, but enabled to operate as the second model if the transducer is absent from the first circuit.

No such method is shown in the Bhatnagar patent. The control shown in Bhatnagar never detects whether a transducer is present. It relies solely on configuration data contained within a configuration memory.

Claim 38 adds the step of detecting whether the first transducer has failed. Nothing in Bhatnagar even suggests that there is a test for the failure of the first transducer.

New claim 39 further requires a scan of the components within the model to identify the operating modes of the model. This is not shown or suggested by the references cited by the Examiner.

CONCLUSION

In view of the above amendments and these remarks, Applicants respectfully submit that the present application is in condition for allowance. A notice to that effect is earnestly and respectfully requested.

Respectfully submitted,

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